

FALLS WATER COMPANY INC (PWS 7100030) SOURCE WATER ASSESSMENT FINAL REPORT

December 17, 2001



State of Idaho Department of Environmental Quality

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Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. This assessment is based on a land use inventory of the designated source water assessment area and sensitivity factors associated with the wells and aquifer characteristics.

This report, *Source Water Assessment for Falls Water Company Inc, Idaho Falls, Idaho*, describes the public drinking water system, the boundaries of the zones of water contribution, and the associated potential contaminant sources located within these boundaries. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. **The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The Falls Water Company Inc drinking water system consists of seven well sources. All the wells have a high susceptibility rating to inorganic, volatile organic, synthetic organic contamination, and microbial contamination due to the large number of sources and the hydrologic sensitivity of the system. Additionally, all but Well #1 rate moderate for system construction.

None of the wells has recorded the presence of synthetic organic or volatile organic contamination during any water chemistry tests. The inorganic contaminants fluoride, barium, and arsenic have been detected, but at levels well below the Maximum Contaminant Level (MCL). Nitrate concentrations have been consistently below 3.0 mg/l. Total coliform bacteria have been detected in the distribution system in April 1995, June 1995, October 1997, May 1998, October 1998, and June 1999. The appearance of contaminants should alert Falls Water Inc that the potential for contamination is very real. Surrounding agricultural land use practices have contributed to the ratings of “High” for County Level Nitrogen Fertilizer Use, County Level Herbicide Use, and Total County Level Ag-Chemical Use. In addition, the delineations cross the synthetic organic priority area for the pesticide atrazine.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

For Falls Water Company Inc, drinking water protection activities should focus on wellhead protection activities and good housekeeping. Surface seals should be maintained and wells should maintain protection from surface flooding. Though systems that collected more than five bacteriological samples per month are currently exempt from conducting Sanitary Surveys, future regulations shall require it. Additionally, there should be a focus on the implementation of practices aimed at reducing the leaching of agricultural chemicals from agricultural land within the designated source water areas. Much of the designated protection areas are outside the direct jurisdiction of Falls Water Company Inc, making collaboration and partnerships with state and local agencies and industry groups critical to the success of source water protection. Since microbial contamination of the distribution system is an occasionally occurring but ongoing problem, Falls Water Company Inc should investigate applying appropriate disinfection practices and their implementation.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus of any drinking water protection plan as the delineations contain some urban and residential land uses. There are multiple resources available to help communities implement protection programs, including the Drinking Water Academy of the U.S. Environmental Protection Agency. As there are transportation corridors through the delineations, the Idaho Department of Transportation should be involved in protection activities. Drinking water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, the Soil Conservation Commission, the local Soil Conservation District, and the Natural Resources Conservation Service.

A community must incorporate a variety of strategies in order to develop a comprehensive drinking water protection plan, be they regulatory in nature (i.e. zoning, permitting) or non-regulatory in nature (i.e. good housekeeping, public education, specific best management practices). For assistance in developing protection strategies please contact the Idaho Falls Regional Office of the Idaho Department of Environmental Quality or the Idaho Rural Water Association.

SOURCE WATER ASSESSMENT FOR FALLS WATER COMPANY INC, IDAHO FALLS, IDAHO

Section 1. Introduction - Basis for Assessment

The following sections contain information necessary to understand how and why this assessment was conducted. **It is important to review this information to understand what the ranking of this source means.** A map showing the delineated source water assessment area and the inventory of significant potential sources of contamination identified within that area are attached. The list of significant potential contaminant source categories and their rankings used to develop the assessment also is attached.

Background

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative susceptibility to contaminants regulated by the Safe Drinking Water Act. This assessment is based on a land use inventory of the delineated assessment area and sensitivity factors associated with the wells and aquifer characteristics.

Level of Accuracy and Purpose of the Assessment

Since there are over 2,900 public water sources in Idaho, there is limited time and resources to accomplish the assessments. All assessments must be completed by May of 2003. An in-depth, site-specific investigation of each significant potential source of contamination is not possible. **Therefore, this assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The ultimate goal of the assessment is to provide data to local communities to develop a protection strategy for their drinking water supply system. The Idaho Department of Environmental Quality (DEQ) recognizes that pollution prevention activities generally require less time and money to implement than treatment of a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a drinking water protection program should be determined by the local community based on its own needs and limitations. Wellhead or drinking water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

Section 2. Conducting the Assessment

General Description of the Source Water Quality

The public drinking water system for the Falls Water Company Inc is comprised of seven ground water wells that serve approximately 5,850 people through approximately 1,900 connections. The wells are located in Bonneville County, to the east of the City of Idaho Falls (Figure 1).

Though there are no significant water chemistry problems in the ground water, there have been detections in the finished well water of the inorganic contaminants (IOCs) fluoride, barium, arsenic, and nitrate at levels below the current Maximum Contaminant Levels (MCLs). Total coliform bacteria have been detected in the distribution system, but repeat samples have never found bacteria present at the wellheads. No volatile organic contaminants (VOCs) or synthetic organic contaminants (SOCs) have been detected in the well water. Surrounding agricultural land use practices have contributed to the ratings of “High” for County Level Nitrogen Fertilizer Use, County Level Herbicide Use, and Total County Level Ag-Chemical Use. In addition, the delineations cross the synthetic organic priority area for the pesticide atrazine.

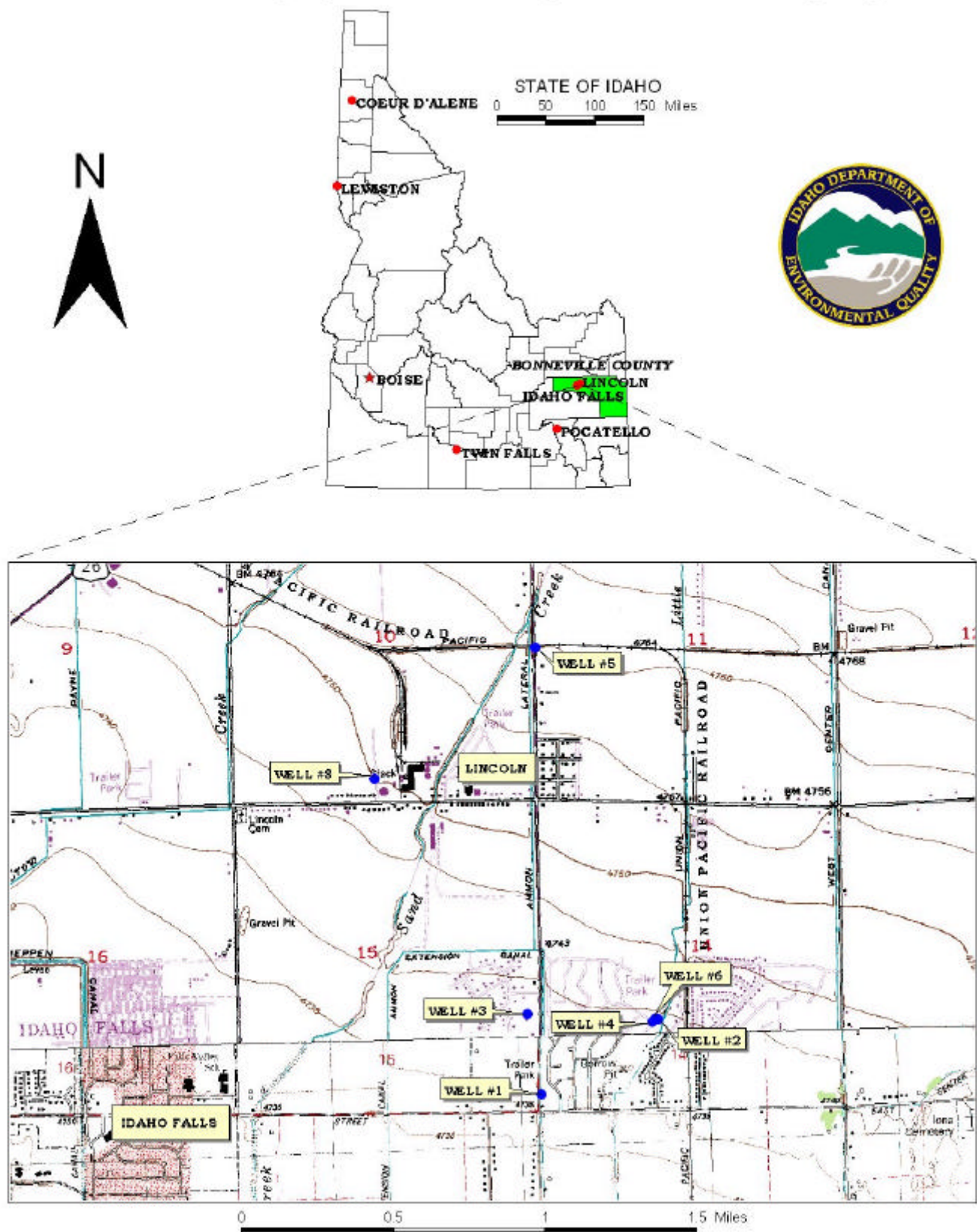
Defining the Zones of Contribution – Delineation

The delineation process establishes the physical area around a well that will become the focal point of the assessment. The process includes mapping the boundaries of the zone of contribution into time-of-travel (TOT) zones (zones indicating the number of years necessary for a particle of water to reach a well) for water in the aquifer. DEQ contracted with Washington Group, International (WGI) to perform the delineations using a refined computer model approved by the EPA in determining the 3-year (Zone 1B), 6-year (Zone 2), and 10-year (Zone 3) TOT for water associated with the rhyolite of the Yellowstone Group in the Eastern Snake River Plain (ESRP) aquifer in the vicinity of the Falls Water Company Inc Wells. The computer model used site specific data, assimilated by WGI from a variety of sources including the Falls Water Company Inc’ well logs, other local area well logs, and hydrogeologic reports (detailed below).

The ESRP is a northeast trending basin located in southeastern Idaho. Ten thousand square miles of the basin are primarily filled with highly fractured layered Quaternary basalt flows of the Snake River Group, which are intercalated with terrestrial and lacustrine (lake-deposited) sediments along the margins (Garabedian, 1992, p. 5). Individual basalt flows range from 10 to 50 feet in thickness and average 20 to 25 feet (Lindholm, 1996, p. 14). Basalt is thickest in the central part of the eastern plain and thins toward the margins. Whitehead (1992, p. 9) estimates the total thickness of the flows to be as great as 5,000 feet. A thin layer (0 to 100 feet) of windblown and fluvial sediments overlies the basalt.

The plain is bound on the northeast by rocks of the Yellowstone Group (mainly rhyolite) and Idavada Volcanics to the southwest. The Snake River flows along part of the southern boundary and is the only drainage that leaves the plain. Rivers and streams entering the plain from the south are tributary to the Snake River. Other than the Big and Little Wood rivers, rivers entering from the north vanish into the highly transmissive basalts of the Snake River Plain aquifer.

FIGURE 1. Geographic Location of Falls Water Company



The layered basalts of the Snake River Group host one of the most productive aquifers in the United States. The aquifer is generally considered unconfined, yet it may be locally confined in some areas because of inter-bedded clay and dense unfractured basalt (Whitehead, 1992, p. 26). Whitehead (1992, p. 22) reports that well yields of 2,000 to 3,000 gal/min are common for wells open to less than 100 feet of the aquifer. Lindholm (1996, p. 18) estimates aquifer thickness to range from several hundred feet near the plain's margin to thousands of feet near the center.

The majority of aquifer recharge results from surface water irrigation activities (incidental recharge), which divert water from the Snake River and its tributaries (Ackerman, 1995, p. 4, and Garabedian, 1992, p. 11). Natural recharge occurs through stream losses, direct precipitation, and tributary basin underflow.

Regional ground water flow is to the southwest paralleling the basin (Cosgrove et al., 1999, p. 21; deSonneville, 1972, p. 78; Garabedian, 1992, p. 48; and Lindholm, 1996, p. 23). Ground water flow direction at the local scale is thought to be highly variable due to preferential flow paths through the fractured and layered basalts.

The delineated source water assessment areas for the Falls Water Company Inc wells can best be described as corridors approximately 20 miles long and 2 miles wide extending to the northeast of the Falls Water Company Inc and ending at the Snake River near Ririe (Appendix A, Figures 2 through 8). Each of the delineations only has the 3-year TOT because the Snake River is assessed to be the main source of the wells' water. The actual data used by WGI in determining the source water assessment delineation areas are available from DEQ upon request.

Identifying Potential Sources of Contamination

A potential source of contamination is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act and has a sufficient likelihood of releasing such contaminants at levels that could pose a concern relative to drinking water sources. The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of groundwater contamination. The locations of potential sources of contamination within the delineation areas were obtained by field surveys conducted by DEQ and from available databases.

Land use within the immediate area of the Falls Water Company Inc wellheads consists of residential uses, while the surrounding area is predominantly irrigated agriculture.

It is important to understand that a release may never occur from a potential source of contamination provided they are using best management practices. Many potential sources of contamination are regulated at the federal level, state level, or both to reduce the risk of release. Therefore, when a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the potential for contamination exists due to the nature of the business, industry, or operation. There are a number of methods that water systems can use to work cooperatively with potential sources of contamination, including educational visits and inspections of stored materials. Many owners of such facilities may not even be aware that they are located near a public water supply well.

Contaminant Source Inventory Process

A two-phased contaminant inventory of the study area was conducted in June 2001. The first phase involved identifying and documenting potential contaminant sources within the Falls Water Company Inc Source Water Assessment Areas (Appendix A; Figures 2, 3, 4, 5, 6, 7, and 8) through the use of computer databases and Geographic Information System maps developed by DEQ. The second, or enhanced, phase of the contaminant inventory involved contacting the operator to identify and add any additional potential sources in the area.

The delineated source water areas encompass long corridors of land between the well sites and the Snake River. The delineation tables describing the potential contaminant sources for each of the wells are located in Appendix A. The number of sources range from 10 (Well #8) to 33 (Well #1). These sources include multiple underground storage tanks (USTs), leaking underground storage tanks (LUSTs), an above ground storage tank (AST), dairies, farms, food processing centers, general contractors, multiple sand and gravel mines, multiple unused recharge wells, and a wastewater land application site. In addition, there are sites regulated by the National Pollutant Discharge Elimination System (NPDES) and the Superfund Amendments and Reauthorization Act (SARA). Additionally, the delineations cross Highway 26, State Highway 48, the Union Pacific Railroad, and the Snake River.

Section 3. Susceptibility Analyses

The water system's susceptibility to contamination was ranked as high, moderate, or low risk according to the following considerations: hydrologic characteristics, physical integrity of the well, land use characteristics, and potentially significant contaminant sources. The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. Therefore, a high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for each well is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. Attachment B contains the susceptibility analysis worksheets. The following summaries describe the rationale for the susceptibility ranking.

Hydrologic Sensitivity

The hydrologic sensitivity of a well is dependent upon four factors: the surface soil composition, the material in the vadose zone (between the land surface and the water table), the depth to first ground water, and the presence of a 50-foot thick fine-grained zone above the producing zone of the well. Slowly draining soils such as silt and clay typically are more protective of ground water than coarse-grained soils such as sand and gravel. In this case, all of the wells have soils in the moderate- to well-drained class. Similarly, fine-grained sediments in the subsurface and a water depth of more than 300 feet protect the ground water from contamination.

Hydrologic sensitivity is high for all of the wells (Table 9). This score reflects the moderate- to well-drained nature of the soil and the nature of the vadose zone being coarse gravels and fractured basalts. Additionally, water was encountered within 100 feet of the surface and there was not 50 feet cumulative thickness of low permeability units or sedimentary interbeds.

Well Construction

Well construction directly affects the ability of the well to protect the aquifer from contaminants. System construction scores are reduced when information shows that potential contaminants will have a more difficult time reaching the intake of the well. Lower scores imply a system is less vulnerable to contamination. For example, if the well casing and annular seal both extend into a low permeability unit, then the possibility of contamination is reduced and the system construction score goes down. If the highest production interval is more than 100 feet below the water table, then the system is considered to have better buffering capacity. Well logs were only available for Wells #4 and #5. If the wellhead and surface seal are maintained to standards, as outlined in Sanitary Surveys, then contamination down the well bore is less likely. If the well is protected from surface flooding and is outside the 100-year floodplain, then contamination from surface events is reduced.

Table 1. Falls Water Company Inc Well Construction Summary Information

| Well | Depth (ft) | Casing: diameter/ thickness (in) | Casing: depth (ft)/ formation | Water Table Depth (ft) | Production Zones (ft) | Surface seal: depth (ft)/ formation | Wellhead/ Sanitary Seal Good? | Drill Year |
|---------|------------|----------------------------------|-------------------------------|------------------------|-----------------------|-------------------------------------|-------------------------------|------------|
| Well #1 | NI | NI/NI | NI/NI | NI | NI | NI/NI | Yes | 1958 |
| Well #2 | NI | NI/NI | NI/NI | NI | NI | NI/NI | Yes | 1960 |
| Well #3 | NI | NI/NI | NI/NI | NI | NI | NI/NI | Yes | 1998 |
| Well #4 | 142 | 16, 12/0.250 | 95/Hard broken gray lava | 68 | 128 – 142 | 20/Large gravel | Yes | 1974 |
| Well #5 | 337 | 20, 16/0.250 | 152/Solid Gray Basalt | 92 | 152 – 337 open hole | 51/Gray broken basalt | Yes | 1979 |
| Well #6 | NI | NI/NI | NI/NI | NI | NI | NI/NI | Yes | 1992 |
| Well #8 | NI | NI/NI | NI/NI | NI | NI | NI/NI | Yes | new |

NI = no information was available

Since Sanitary Surveys are not required for this system, DEQ contacted the operator and learned that annual steps are taken to keep the wells sealed and protected from surface flooding. Based on the two well logs available, the casing and annular seal were only in low permeability zones for Well #5. Additionally, the highest production zones were not more than 100 feet below the water table.

The available well logs allowed a determination as to whether current public water system (PWS) construction standards are being met for Wells #4 and #5. Though the wells may have been in compliance with standards when they were completed, current PWS well construction standards are more stringent. The Idaho Department of Water Resources *Well Construction Standards Rules* (1993) require all PWSs to follow DEQ standards as well. IDAPA 58.01.08.550 requires that PWSs follow the *Recommended Standards for Water Works* (1997) during construction. Table 1 of the *Recommended Standards for Water Works* (1997) lists the required steel casing thickness for various diameter wells. Twelve-inch and greater diameter wells require a casing thickness of at least 0.375-inches. The Falls Water Company Inc' wells have 0.250-inch thick casing. As such, the wells were assessed an additional point in the system construction rating.

Overall, the wells rate moderate for system construction due to the wellhead and surface seal activities performed by the operator on an annual basis.

Potential Contaminant Source and Land Use

All the wells rate high for IOCs, VOCs (i.e. petroleum products), SOC (i.e. pesticides), and microbial contaminants (i.e. bacteria). Agricultural land uses and the numerous potential contaminants in the delineated source areas account for the major contribution of points to the potential contaminant inventory rating. The wells are in a county with high levels of nitrogen fertilizer use, high herbicide use, and high total ag-chemical use.

Final Susceptibility Ranking

A detection above a drinking water standard MCL or a detection of total coliform bacteria or fecal coliform bacteria at the wellhead will automatically give a high susceptibility rating to a well despite the land use of the area because a pathway for contamination already exists. Hydrologic sensitivity and system construction scores are heavily weighted in the final scores. Having multiple potential contaminant sources in the 0 to 3-year time of travel zone (Zone 1B) and agricultural land contribute greatly to the overall ranking. In terms of total susceptibility, all of the wells rate high for all categories.

Table 2. Summary of Falls Water Company Inc Susceptibility Evaluation

| Well | Susceptibility Scores ¹ | | | | | | | | | |
|---------|------------------------------------|-----------------------|-----|-----|------------|---------------------|------------------------------|-----|-----|------------|
| | Hydrologic Sensitivity | Contaminant Inventory | | | | System Construction | Final Susceptibility Ranking | | | |
| | | IOC | VOC | SOC | Microbials | | IOC | VOC | SOC | Microbials |
| Well #1 | H | H | H | H | H | M | H | H | H | H |
| Well #2 | H | H | H | H | H | M | H | H | H | H |
| Well #3 | H | H | H | H | H | M | H | H | H | H |
| Well #4 | H | H | H | H | H | M | H | H | H | H |
| Well #5 | H | H | H | H | H | M | H | H | H | H |
| Well #6 | H | H | H | H | H | M | H | H | H | H |
| Well #8 | H | H | H | H | H | M | H | H | H | H |

¹H = High Susceptibility, M = Moderate Susceptibility, L = Low Susceptibility,

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Susceptibility Summary

Overall, all the wells rank high in susceptibility for all contaminant categories. The well-drained nature of the soils, the intense agricultural practices, the high county wide use of agricultural chemicals, and the existence of local businesses as potential contaminant sources add up to the high susceptibility ratings. The high ranking in hydrologic sensitivity and the lack of system construction knowledge contributed to the high scores.

Though there are no significant water chemistry problems in the ground water, there have been detections in the finished well water of the IOCs fluoride, barium, arsenic, and nitrate at levels below the current MCLs. Total coliform bacteria have been detected in the distribution system, but repeat samples have never found bacteria present at the wellheads. No VOCs or SOCs have been detected in the well water. Surrounding agricultural land use practices have contributed to the ratings of “High” for County Level Nitrogen Fertilizer Use, County Level Herbicide Use, and Total County Level Ag-Chemical Use. In addition, the delineations cross the synthetic organic priority area for the pesticide atrazine.

Section 4. Options for Drinking Water Protection

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

An effective drinking water protection program is tailored to the particular local drinking water protection area. A community with a fully developed drinking water protection program will incorporate many strategies. For Falls Water Company Inc, drinking water protection activities should focus on wellhead protection activities and good housekeeping. Surface seals should be maintained and wells should maintain protection from surface flooding. Though systems that collected more than five bacteriological samples per month are currently exempt from conducting Sanitary Surveys, future regulations shall require it. Additionally, there should be a focus on implementation of practices aimed at reducing the leaching of agricultural chemicals from agricultural land within the designated source water areas. Much of the designated protection areas are outside the direct jurisdiction of Falls Water Company Inc, making collaboration and partnerships with state and local agencies and industry groups critical to the success of source water protection. Since microbial contamination of the distribution system is an occasional but ongoing problem, Falls Water Company Inc should investigate applying appropriate disinfection practices and their implementation.

Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. A strong public education program should be a primary focus of any drinking water protection plan as the delineations contain some urban and residential land uses. There are multiple resources available to help communities implement protection programs, including the Drinking Water Academy of the U.S. Environmental Protection Agency. As there are transportation corridors through the delineations, the Idaho Department of Transportation should be involved in protection activities. Drinking water protection activities for agriculture should be coordinated with the Idaho State Department of Agriculture, the Soil Conservation Commission, the local Soil Conservation District, and the Natural Resources Conservation Service.

A community must incorporate a variety of strategies in order to develop a comprehensive drinking water protection plan, be they regulatory in nature (i.e. zoning, permitting) or non-regulatory in nature (i.e. good housekeeping, public education, specific best management practices). For assistance in developing protection strategies please contact the Idaho Falls Regional Office of the Idaho Department of Environmental Quality or the Idaho Rural Water Association.

Assistance

Public water supplies and others may call the following DEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the DEQ office for preliminary review and comments.

Idaho Falls Regional DEQ Office (208) 528-2650

State DEQ Office (208) 373-0502

Website: <http://www2.state.id.us/deq>

Water suppliers serving fewer than 10,000 persons may contact John Bokor, Idaho Rural Water Association, at 1-800-962-3257 for assistance with wellhead protection strategies.

POTENTIAL CONTAMINANT INVENTORY

LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as ASuperfund® is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System)

– Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.

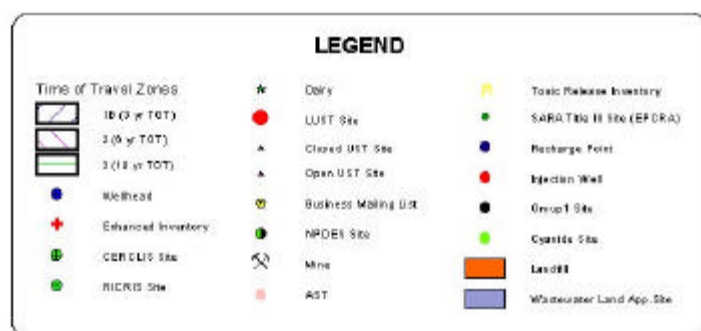
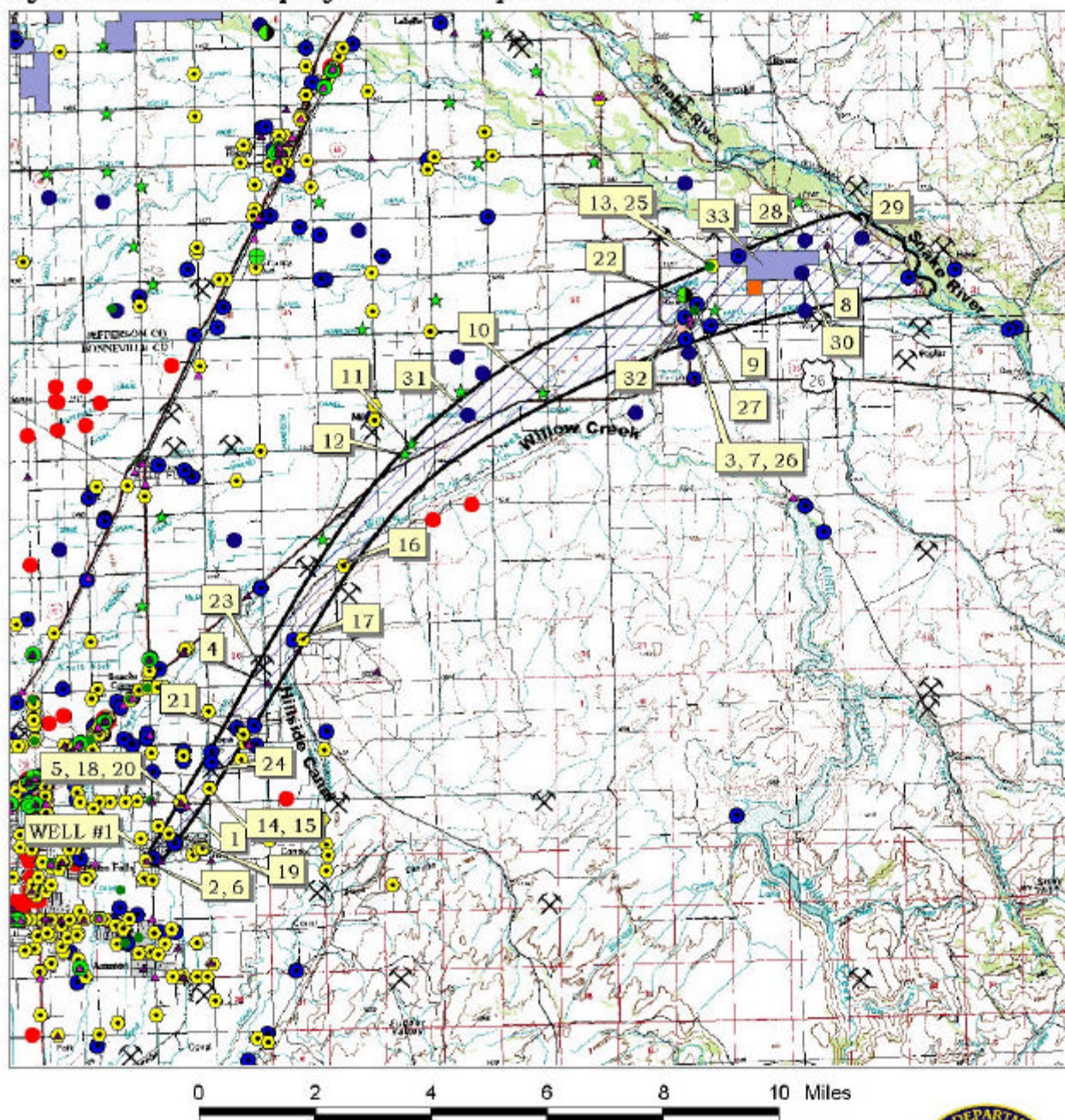
References Cited

- Ackerman, D.J., 1995, Analysis of Steady-State Flow and Advective Transport in the Eastern Snake River Plain Aquifer System, Idaho, U.S. Geological Survey Water-Resources Investigations Report 94-4257, I-FY95, 25 p.
- Cosgrove, D.M., G.S. Johnson and S. Laney, 1999, Description of the IDWR/UI Snake River Plain Aquifer Model (SRPAM), Idaho Water Resources Research Institute, 95 p.
- DeSonneville, J.L.J., 1972, Development of a Mathematical Groundwater Model: Water Resources Research Institute, University of Idaho, Moscow, Idaho, 227 p.
- Garabedian, S.P., 1992, Hydrology and Digital Simulation of the Regional Aquifer System, Eastern Snake River Plain, Idaho, U.S. Geological Survey Professional Paper 1408-F, 102 p.
- Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, 1997. "Recommended Standards for Water Works."
- Idaho Department of Agriculture, 1998. Unpublished Data.
- Idaho Department of Environmental Quality, 1997. Design Standards for Public Drinking Water Systems. IDAPA 58.01.08.550.01.
- Idaho Department of Water Resources, 1993. Administrative Rules of the Idaho Water Resource Board: Well Construction Standards Rules. IDAPA 37.03.09.
- Lindholm, G.F., 1996, Summary of the Snake River Plain Regional Aquifer-System Analysis in Idaho and Eastern Oregon, U.S. Geological Survey Professional Paper 1408-A, 59 p.
- Whitehead, R.L., 1992, Geohydrological Framework of the Snake River Plain Regional Aquifer System, Idaho and Eastern Oregon, U.S. Geological Survey Professional Paper 1408-B, I-FY92, 32 p.

Attachment A

Delineation Figures and Potential Contaminant Inventory Tables Falls Water Company Inc

Figure 2. Falls Water Company Delineation Map and Potential Contaminant Source Locations



N

PWS# 7100030
WELL #1



Table 3. Falls Water Company Inc. Well #1, Potential Contaminant Inventory

| SITE # | Source Description ¹ | TOT Zone ² (years) | Source of Information | Potential Contaminants ³ |
|--------|---|----------------------------------|-----------------------|-------------------------------------|
| 1 | UST – open | 0-3 | Database Search | IOC, VOC, SOC |
| 2, 6 | UST – open | 0-3 | Database Search | VOC, SOC |
| 3, 32 | UST – open, AST | 0-3 | Database Search | VOC, SOC |
| 4 | UST – closed | 0-3 | Database Search | IOC, VOC, SOC |
| 5 | UST – closed | 0-3 | Database Search | VOC, SOC |
| 7, 26 | UST – open, SARA | 0-3 | Database Search | VOC, SOC |
| 8 | UST – closed | 0-3 | Database Search | IOC, VOC, SOC |
| 9 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 10 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 11 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 12 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 13, 25 | Potatoes-Processed, SARA | 0-3 | Database Search | IOC, SOC, Microbes |
| 14, 15 | Trapping Equipment & Supplies, Fur Farms | 0-3 | Database Search | IOC, SOC, Microbes |
| 16 | General Contractor | 0-3 | Database Search | IOC, VOC, SOC |
| 17 | Steel Erectors | 0-3 | Database Search | IOC, VOC, SOC |
| 18 | Farms | 0-3 | Database Search | IOC, SOC, Microbes |
| 19 | Painters | 0-3 | Database Search | IOC, VOC, SOC |
| 20 | Meat Processing | 0-3 | Database Search | IOC, SOC, Microbes |
| 21 | Trucking-Heavy Hauling | 0-3 | Database Search | IOC, VOC, SOC |
| 22 | NPDES | 0-3 | Database Search | IOC, Microbes |
| 23 | Sand and gravel pit | 0-3 | Database Search | IOC |
| 24 | Sand and gravel pit | 0-3 | Database Search | IOC |
| 27 | SARA | 0-3 | Database Search | IOC, VOC |
| 28 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 29 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 30 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 31 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 33 | WLAP site | 0-3 | Database Search | IOC, VOC, SOC, Microbes |
| | Highway 26 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | State Highway 48 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Union Pacific Railroad | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Snake River | 0-10 | GIS Map | IOC, VOC, SOC, Microbes |

¹ UST = underground storage tank, AST = above ground storage tank,

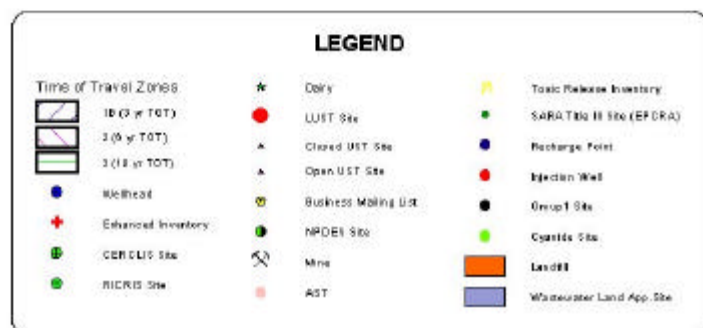
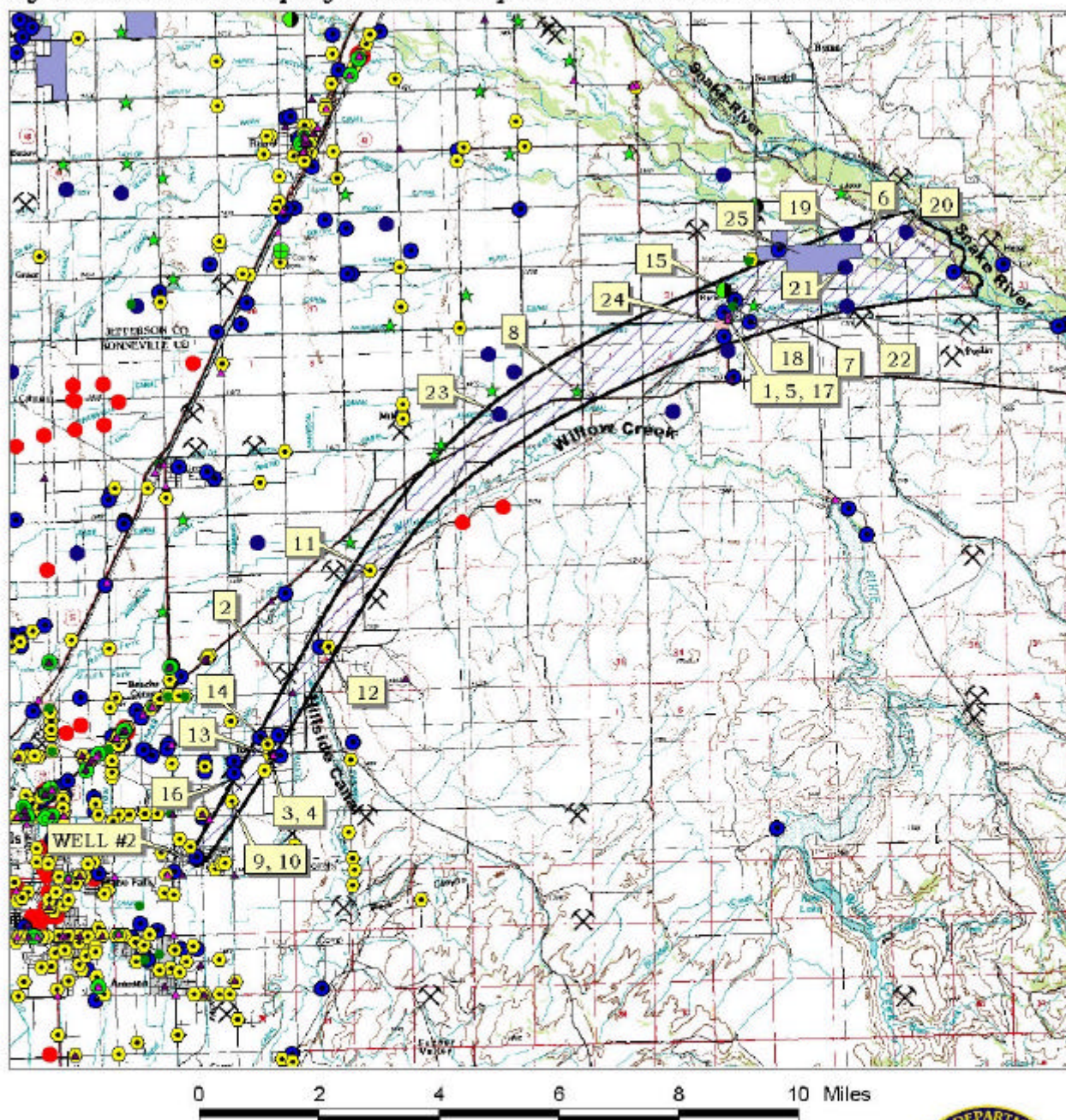
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NPDES = National Pollutant Discharge Elimination System, WLAP = wastewater land application site

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Figure 3. Falls Water Company Delineation Map and Potential Contaminant Source Locations



PWS# 7100030
WELL #2

Table 4. Falls Water Company Inc. Well #2, Potential Contaminant Inventory

| SITE # | Source Description ¹ | TOT Zone ² (years) | Source of Information | Potential Contaminants ³ |
|--------|---|----------------------------------|-----------------------|-------------------------------------|
| 1, 24 | UST – open, AST | 0-3 | Database Search | VOC, SOC |
| 2 | UST – closed | 0-3 | Database Search | IOC, VOC, SOC |
| 3 | UST – open | 0-3 | Database Search | VOC, SOC |
| 4 | UST – open | 0-3 | Database Search | VOC, SOC |
| 5, 17 | UST – open, SARA | 0-3 | Database Search | VOC, SOC |
| 6 | UST – closed | 0-3 | Database Search | IOC, VOC, SOC |
| 7 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 8 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 9, 10 | Trapping Equipment & Supplies, Fur Farms | 0-3 | Database Search | IOC, SOC, Microbes |
| 11 | General Contractor | 0-3 | Database Search | IOC, VOC, SOC |
| 12 | Steel Erectors | 0-3 | Database Search | IOC, VOC, SOC |
| 13 | Grain Elevators | 0-3 | Database Search | IOC, VOC, SOC, Microbes |
| 14 | Trucking-Heavy Hauling | 0-3 | Database Search | IOC, VOC, SOC |
| 15 | NPDES | 0-3 | Database Search | IOC, Microbes |
| 16 | Sand and gravel pit | 0-3 | Database Search | IOC |
| 18 | SARA | 0-3 | Database Search | IOC, VOC |
| 19 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 20 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 21 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 22 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 23 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 25 | WLAP site | 0-3 | Database Search | IOC, VOC, SOC, Microbes |
| | Highway 26 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | State Highway 48 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Union Pacific Railroad | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Snake River | 0-10 | GIS Map | IOC, VOC, SOC, Microbes |

¹ UST = underground storage tank, AST = above ground storage tank,

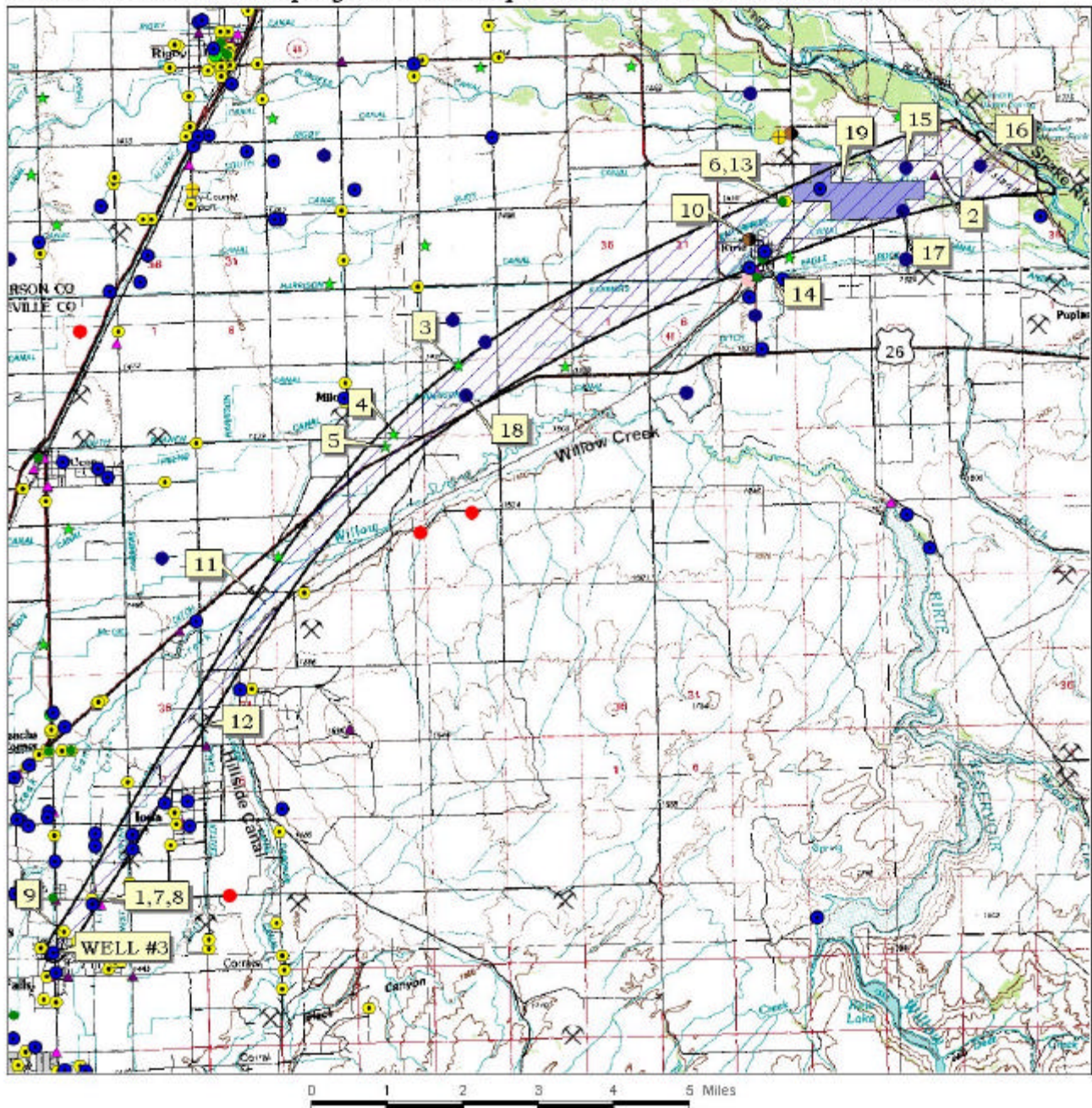
SARA = Superfund Amendments and Reauthorization Act,

NPDES = National Pollutant Discharge Elimination System, WLAP = wastewater land application site

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

FIGURE 4. Falls Water Company Delineation Map and Potential Contaminant Source Locations



PWS# 7100030
WELL #3

Table 5. Falls Water Company Inc. Well #3, Potential Contaminant Inventory

| SITE # | Source Description ¹ | TOT Zone ² (years) | Source of Information | Potential Contaminants ³ |
|--------|---------------------------------|----------------------------------|-----------------------|-------------------------------------|
| 1 | UST – closed | 0-3 | Database Search | VOC, SOC |
| 2 | UST – closed | 0-3 | Database Search | IOC, VOC, SOC |
| 3 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 4 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 5 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 6, 13 | Potatoes-Processed; SARA | 0-3 | Database Search | IOC, SOC, Microbes |
| 7 | Farms | 0-3 | Database Search | IOC, SOC, Microbes |
| 8 | Meat Processing | 0-3 | Database Search | IOC, SOC, Microbes |
| 9 | Printers | 0-3 | Database Search | IOC, VOC |
| 10 | NPDES | 0-3 | Database Search | IOC, Microbes |
| 11 | Sand and gravel pit | 0-3 | Database Search | IOC |
| 12 | Sand and gravel pit | 0-3 | Database Search | IOC |
| 14 | SARA | 0-3 | Database Search | IOC, VOC |
| 15 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 16 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 17 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 18 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 19 | WLAP site | 0-3 | Database Search | IOC, VOC, SOC, Microbes |
| | Highway 26 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | State Highway 48 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Union Pacific Railroad | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Snake River | 0-10 | GIS Map | IOC, VOC, SOC, Microbes |

¹ UST = underground storage tank, AST = above ground storage tank,

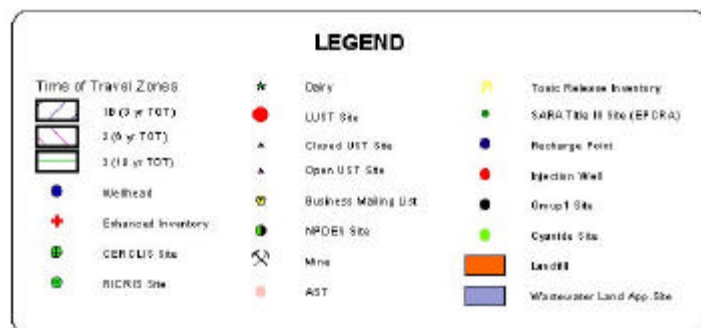
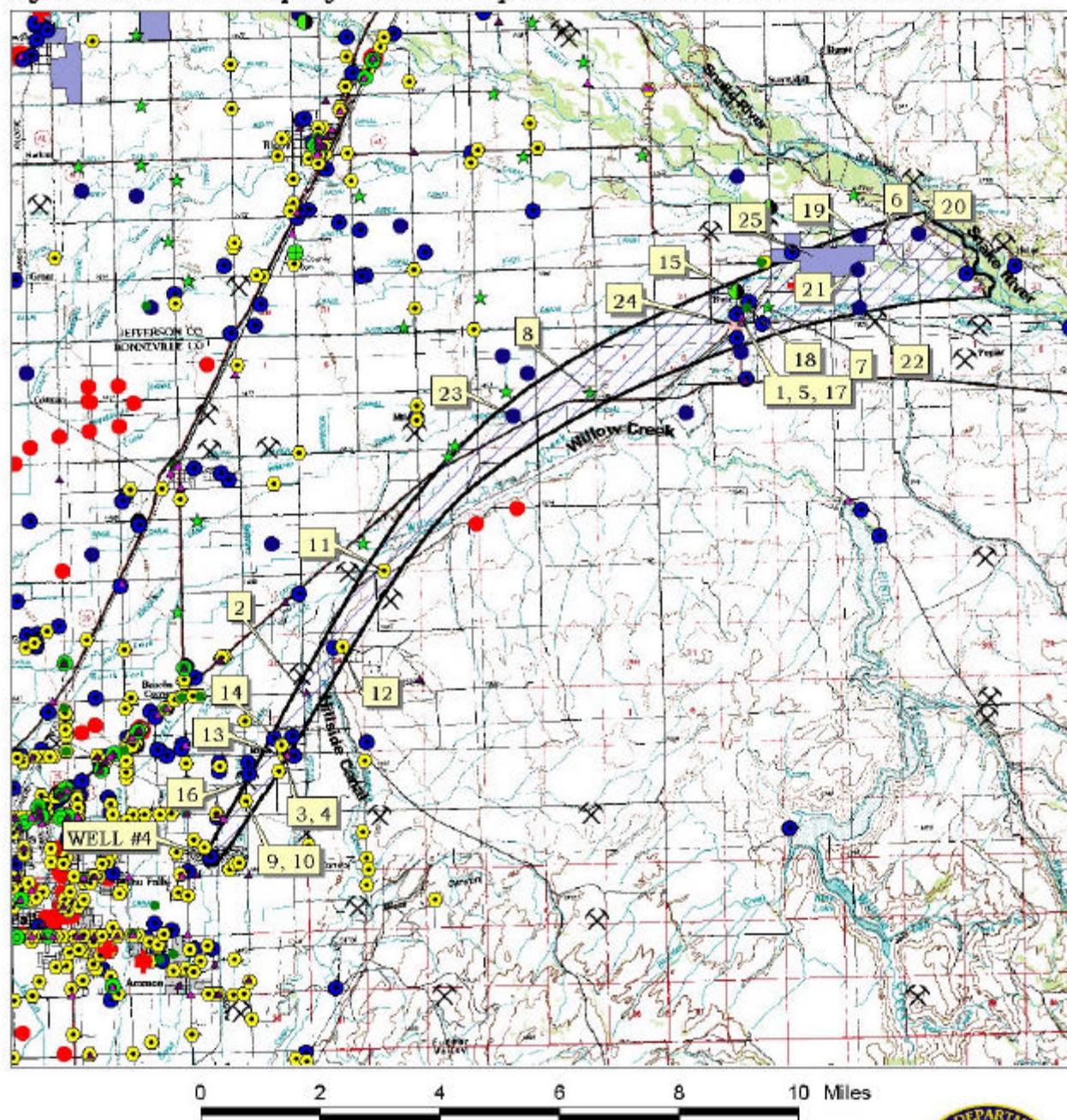
SARA = Superfund Amendments and Reauthorization Act,

NPDES = National Pollutant Discharge Elimination System, WLAP = wastewater land application site

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Figure 5. Falls Water Company Delineation Map and Potential Contaminant Source Locations



PWS# 7100030
WELL #4

Table 6. Falls Water Company Inc. Well #4, Potential Contaminant Inventory

| SITE # | Source Description ¹ | TOT Zone ² (years) | Source of Information | Potential Contaminants ³ |
|--------|---|----------------------------------|-----------------------|-------------------------------------|
| 1, 24 | UST – open, AST | 0-3 | Database Search | VOC, SOC |
| 2 | UST – closed | 0-3 | Database Search | IOC, VOC, SOC |
| 3 | UST – open | 0-3 | Database Search | VOC, SOC |
| 4 | UST – open | 0-3 | Database Search | VOC, SOC |
| 5, 17 | UST – open, SARA | 0-3 | Database Search | VOC, SOC |
| 6 | UST – closed | 0-3 | Database Search | IOC, VOC, SOC |
| 7 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 8 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 9, 10 | Trapping Equipment & Supplies, Fur Farms | 0-3 | Database Search | IOC, SOC, Microbes |
| 11 | General Contractor | 0-3 | Database Search | IOC, VOC, SOC |
| 12 | Steel Erectors | 0-3 | Database Search | IOC, VOC, SOC |
| 13 | Grain Elevators | 0-3 | Database Search | IOC, VOC, SOC, Microbes |
| 14 | Trucking-Heavy Hauling | 0-3 | Database Search | IOC, VOC, SOC |
| 15 | NPDES | 0-3 | Database Search | IOC, Microbes |
| 16 | Sand and gravel pit | 0-3 | Database Search | IOC |
| 18 | SARA | 0-3 | Database Search | IOC, VOC |
| 19 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 20 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 21 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 22 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 23 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 25 | WLAP site | 0-3 | Database Search | IOC, VOC, SOC, Microbes |
| | Highway 26 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | State Highway 48 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Union Pacific Railroad | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Snake River | 0-10 | GIS Map | IOC, VOC, SOC, Microbes |

¹ UST = underground storage tank, AST = above ground storage tank,

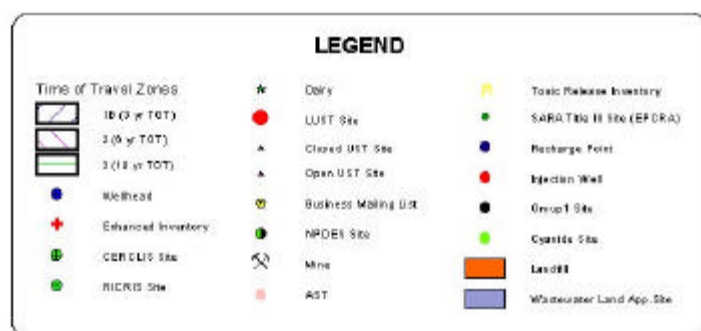
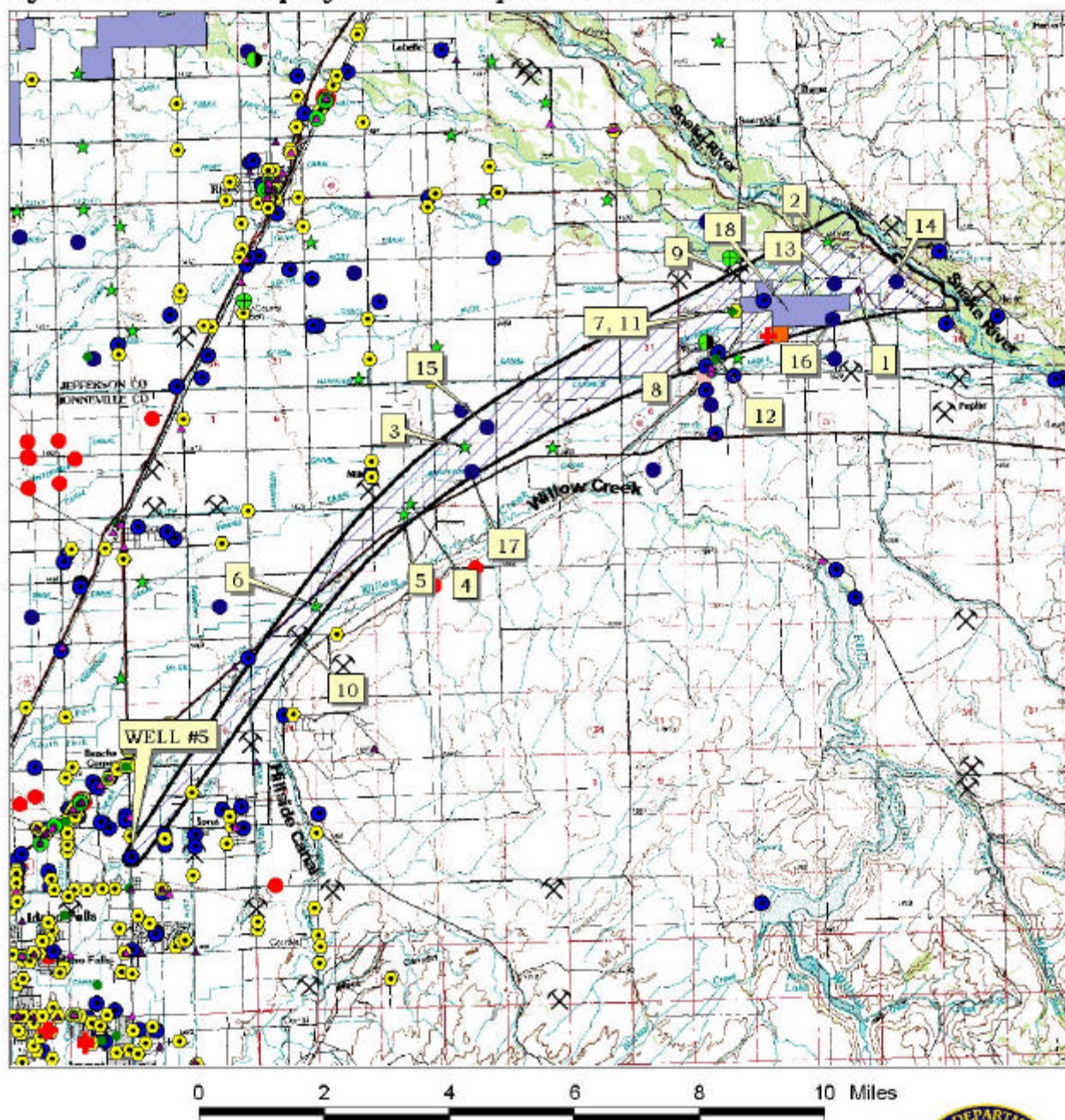
SARA = Superfund Amendments and Reauthorization Act,

NPDES = National Pollutant Discharge Elimination System, WLAP = wastewater land application site

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Figure 6. Falls Water Company Delineation Map and Potential Contaminant Source Locations



PWS# 7100030
WELL #5

Table 7. Falls Water Company Inc. Well #5, Potential Contaminant Inventory

| SITE # | Source Description ¹ | TOT Zone ² (years) | Source of Information | Potential Contaminants ³ |
|--------|---------------------------------|----------------------------------|-----------------------|-------------------------------------|
| 1 | UST – closed | 0-3 | Database Search | IOC, VOC, SOC |
| 2 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 3 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 4 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 5 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 6 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 7, 11 | Potatoes-Processed; SARA | 0-3 | Database Search | IOC, SOC, Microbes |
| 8 | NPDES | 0-3 | Database Search | IOC, Microbes |
| 9 | Sand and gravel pit | 0-3 | Database Search | IOC |
| 10 | Sand and gravel pit | 0-3 | Database Search | IOC |
| 12 | SARA | 0-3 | Database Search | IOC, VOC |
| 13 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 14 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 15 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 16 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 17 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 18 | WLAP site | 0-3 | Database Search | IOC, VOC, SOC, Microbes |
| | Highway 26 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | State Highway 48 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Union Pacific Railroad | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Snake River | 0-10 | GIS Map | IOC, VOC, SOC, Microbes |

¹ UST = underground storage tank, AST = above ground storage tank,

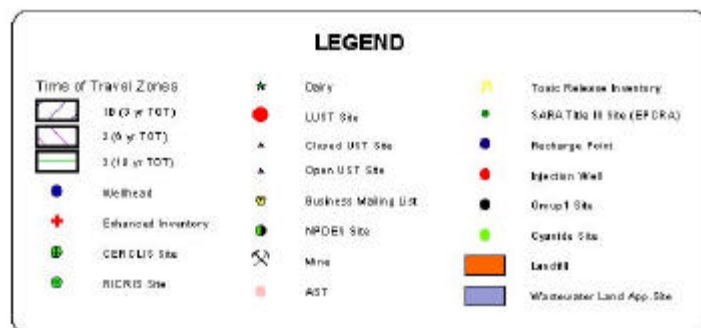
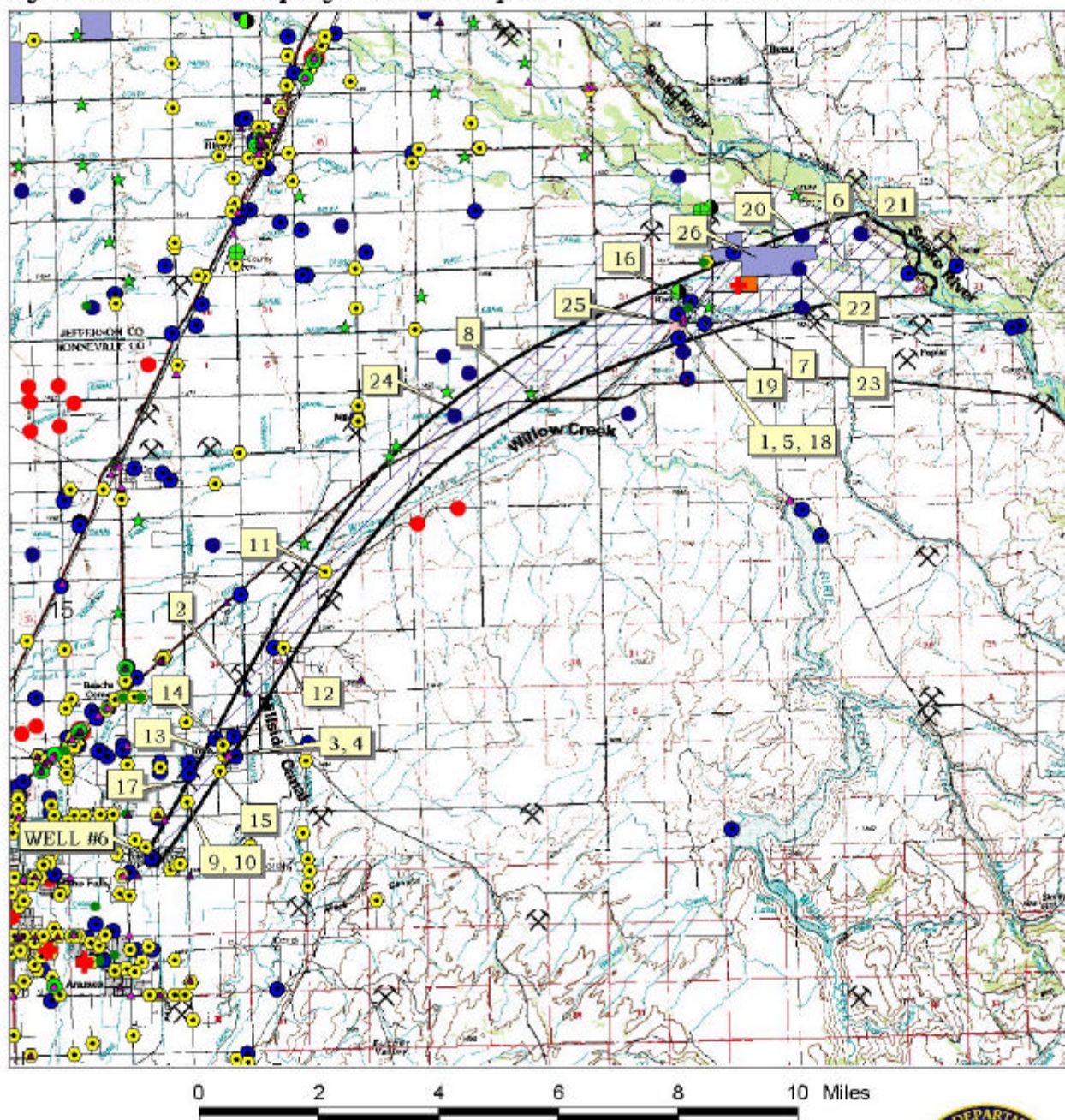
SARA = Superfund Amendments and Reauthorization Act,

NPDES = National Pollutant Discharge Elimination System, WLAP = wastewater land application site

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Figure 7. Falls Water Company Delineation Map and Potential Contaminant Source Locations



N

PWS# 7100030
WELL #6



Table 8. Falls Water Company Inc. Well #6, Potential Contaminant Inventory

| SITE # | Source Description ¹ | TOT Zone ² (years) | Source of Information | Potential Contaminants ³ |
|--------|---|----------------------------------|-----------------------|-------------------------------------|
| 1, 25 | UST – open, AST | 0-3 | Database Search | VOC, SOC |
| 2 | UST – closed | 0-3 | Database Search | IOC, VOC, SOC |
| 3 | UST – open | 0-3 | Database Search | VOC, SOC |
| 4 | UST – open | 0-3 | Database Search | VOC, SOC |
| 5, 18 | UST – open, SARA | 0-3 | Database Search | VOC, SOC |
| 6 | UST – closed | 0-3 | Database Search | IOC, VOC, SOC |
| 7 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 8 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 9, 10 | Trapping Equipment & Supplies, Fur Farms | 0-3 | Database Search | IOC, SOC, Microbes |
| 11 | General Contractor | 0-3 | Database Search | IOC, VOC, SOC |
| 12 | Steel Erectors | 0-3 | Database Search | IOC, VOC, SOC |
| 13 | Grain Elevators | 0-3 | Database Search | IOC, VOC, SOC, Microbes |
| 14 | Trucking-Heavy Hauling | 0-3 | Database Search | IOC, VOC, SOC |
| 15 | General Contractor | 0-3 | Database Search | IOC, VOC, SOC |
| 16 | NPDES | 0-3 | Database Search | IOC, Microbes |
| 17 | Sand and gravel pit | 0-3 | Database Search | IOC |
| 19 | SARA | 0-3 | Database Search | IOC, VOC |
| 20 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 21 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 22 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 23 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 24 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 26 | WLAP site | 0-3 | Database Search | IOC, VOC, SOC, Microbes |
| | Highway 26 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | State Highway 48 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Union Pacific Railroad | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Snake River | 0-10 | GIS Map | IOC, VOC, SOC, Microbes |

¹ UST = underground storage tank, AST = above ground storage tank,

SARA = Superfund Amendments and Reauthorization Act,

NPDES = National Pollutant Discharge Elimination System, WLAP = wastewater land application site

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical



PWS# 7100030
WELL #8

Table 9. Falls Water Company Inc. Well #8, Potential Contaminant Inventory

| SITE # | Source Description ¹ | TOT Zone ² (years) | Source of Information | Potential Contaminants ³ |
|--------|--------------------------------------|----------------------------------|-----------------------|-------------------------------------|
| 1 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 2 | Dairy ≤ 200 cows | 0-3 | Database Search | IOC, Microbes |
| 3, 8 | Potatoes-Processed; SARA | 0-3 | Database Search | IOC, SOC, Microbes |
| 4 | Paving Contractors | 0-3 | Database Search | IOC, VOC, SOC |
| 5 | Automobile Body-Repairing & Painting | 0-3 | Database Search | IOC, VOC, SOC |
| 6 | General Contractor | 0-3 | Database Search | IOC, VOC, SOC |
| 7 | Sand and gravel pit | 0-3 | Database Search | IOC |
| 9 | Recharge point - unused | 0-3 | Database Search | IOC, VOC, SOC |
| 10 | WLAP site | 0-3 | Database Search | IOC, VOC, SOC, Microbes |
| | Highway 26 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | State Highway 48 | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Union Pacific Railroad | 0-3 | GIS Map | IOC, VOC, SOC, Microbes |
| | Snake River | 0-10 | GIS Map | IOC, VOC, SOC, Microbes |

¹ UST = underground storage tank, AST = above ground storage tank,

SARA = Superfund Amendments and Reauthorization Act,

NPDES = National Pollutant Discharge Elimination System, WLAP = wastewater land application site

² TOT = time-of-travel (in years) for a potential contaminant to reach the wellhead

³ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Attachment B

Falls Water Company Inc Susceptibility Analysis Worksheets

The final scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.273)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.375)

Final Susceptibility Scoring:

0 - 5 Low Susceptibility

6 - 12 Moderate Susceptibility

≥ 13 High Susceptibility

| | | | | | |
|--|--------------------|-----------|-----------|-----------|-----------------|
| 1. System Construction | | SCORE | | | |
| Drill Date | 06/30/1958 | | | | |
| Driller Log Available | NO | | | | |
| Sanitary Survey (if yes, indicate date of last survey) | YES | 1996 | | | |
| Well meets IDWR construction standards | NO | 1 | | | |
| Wellhead and surface seal maintained | YES | 0 | | | |
| Casing and annular seal extend to low permeability unit | NO | 2 | | | |
| Highest production 100 feet below static water level | NO | 1 | | | |
| Well located outside the 100 year flood plain | YES | 0 | | | |
| Total System Construction Score | | 4 | | | |
| 2. Hydrologic Sensitivity | | | | | |
| Soils are poorly to moderately drained | NO | 2 | | | |
| Vadose zone composed of gravel, fractured rock or unknown | YES | 1 | | | |
| Depth to first water > 300 feet | NO | 1 | | | |
| Aquitard present with > 50 feet cumulative thickness | NO | 2 | | | |
| Total Hydrologic Score | | 6 | | | |
| 3. Potential Contaminant / Land Use - ZONE 1A | | IOC Score | VOC Score | SOC Score | Microbial Score |
| Land Use Zone 1A | IRRIGATED CROPLAND | 2 | 2 | 2 | 2 |
| Farm chemical use high | YES | 2 | 0 | 2 | |
| IOC, VOC, SOC, or Microbial sources in Zone 1A | NO | NO | NO | NO | NO |
| Total Potential Contaminant Source/Land Use Score - Zone 1A | | 4 | 2 | 4 | 2 |
| Potential Contaminant / Land Use - ZONE 1B | | | | | |
| Contaminant sources present (Number of Sources) | YES | 27 | 21 | 22 | 13 |
| (Score = # Sources X 2) 8 Points Maximum | | 8 | 8 | 8 | 8 |
| Sources of Class II or III leacheable contaminants or | YES | 16 | 11 | 9 | |
| 4 Points Maximum | | 4 | 4 | 4 | |
| Zone 1B contains or intercepts a Group 1 Area | YES | 0 | 0 | 2 | 0 |
| Land use Zone 1B Greater Than 50% Irrigated Agricultural Land | | 4 | 4 | 4 | 4 |
| Total Potential Contaminant Source / Land Use Score - Zone 1B | | 16 | 16 | 18 | 12 |
| Potential Contaminant / Land Use - ZONE II | | | | | |
| Contaminant Sources Present | YES | 2 | 2 | 2 | |
| Sources of Class II or III leacheable contaminants or | YES | 1 | 1 | 1 | |
| Land Use Zone II | | 0 | 0 | 0 | |
| Potential Contaminant Source / Land Use Score - Zone II | | 3 | 3 | 3 | 0 |
| Potential Contaminant / Land Use - ZONE III | | | | | |
| Contaminant Source Present | YES | 1 | 1 | 1 | |
| Sources of Class II or III leacheable contaminants or | YES | 1 | 1 | 1 | |
| Is there irrigated agricultural lands that occupy > 50% of | NO | 0 | 0 | 0 | |
| Total Potential Contaminant Source / Land Use Score - Zone III | | 2 | 2 | 2 | 0 |
| Cumulative Potential Contaminant / Land Use Score | | 25 | 23 | 27 | 14 |

| | | | | |
|--------------------------------------|--|------|------------------------|------|
| 4. Final Susceptibility Source Score | 15 | 15 | 15 | 15 |
| 5. Final Well Ranking | High | High | High | High |
| Ground Water Susceptibility Report | Public Water System Name : FALLS WATER COMPANY INC | | Well# : WELL #2 | |
| | Public Water System Number 7100030 | | 09/20/2001 11:30:33 AM | |

| | | | | |
|--|--------------------|-----------|-----------|---------------------------|
| 1. System Construction | SCORE | | | |
| Drill Date | 05/03/1960 | | | |
| Driller Log Available | NO | | | |
| Sanitary Survey (if yes, indicate date of last survey) | YES | 1996 | | |
| Well meets IDWR construction standards | NO | 1 | | |
| Wellhead and surface seal maintained | YES | 0 | | |
| Casing and annular seal extend to low permeability unit | NO | 2 | | |
| Highest production 100 feet below static water level | NO | 1 | | |
| Well located outside the 100 year flood plain | YES | 0 | | |
| Total System Construction Score | | 4 | | |
| 2. Hydrologic Sensitivity | | | | |
| Soils are poorly to moderately drained | NO | 2 | | |
| Vadose zone composed of gravel, fractured rock or unknown | YES | 1 | | |
| Depth to first water > 300 feet | NO | 1 | | |
| Aquitard present with > 50 feet cumulative thickness | NO | 2 | | |
| Total Hydrologic Score | | 6 | | |
| 3. Potential Contaminant / Land Use - ZONE 1A | | IOC Score | VOC Score | SOC Score Microbial Score |
| Land Use Zone 1A | IRRIGATED CROPLAND | 2 | 2 | 2 2 |
| Farm chemical use high | YES | 2 | 0 | 2 |
| IOC, VOC, SOC, or Microbial sources in Zone 1A | NO | NO | NO | NO |
| Total Potential Contaminant Source/Land Use Score - Zone 1A | | 4 | 2 | 4 2 |
| Potential Contaminant / Land Use - ZONE 1B | | | | |
| Contaminant sources present (Number of Sources) | YES | 21 | 20 | 20 9 |
| (Score = # Sources X 2) 8 Points Maximum | | 8 | 8 | 8 8 |
| Sources of Class II or III leacheable contaminants or | YES | 13 | 10 | 7 |
| 4 Points Maximum | | 4 | 4 | 4 |
| Zone 1B contains or intercepts a Group 1 Area | YES | 0 | 0 | 2 0 |
| Land use Zone 1B Greater Than 50% Irrigated Agricultural Land | | 4 | 4 | 4 4 |
| Total Potential Contaminant Source / Land Use Score - Zone 1B | | 16 | 16 | 18 12 |
| Potential Contaminant / Land Use - ZONE II | | | | |
| Contaminant Sources Present | YES | 2 | 2 | 2 |
| Sources of Class II or III leacheable contaminants or | YES | 1 | 1 | 1 |
| Land Use Zone II | | 0 | 0 | 0 |
| Potential Contaminant Source / Land Use Score - Zone II | | 3 | 3 | 3 0 |
| Potential Contaminant / Land Use - ZONE III | | | | |
| Contaminant Source Present | YES | 1 | 1 | 1 |
| Sources of Class II or III leacheable contaminants or | YES | 1 | 1 | 1 |
| Is there irrigated agricultural lands that occupy > 50% of | NO | 0 | 0 | 0 |
| Total Potential Contaminant Source / Land Use Score - Zone III | | 2 | 2 | 2 0 |

| | | | | | |
|---|--|------------------------|-----------|-----------|-----------------|
| Cumulative Potential Contaminant / Land Use Score | | 25 | 23 | 27 | 14 |
| 4. Final Susceptibility Source Score | | 15 | 15 | 15 | 15 |
| 5. Final Well Ranking | | High | High | High | High |
| Ground Water Susceptibility Report | Public Water System Name : FALLS WATER COMPANY INC | Well# : WELL #3 | | | |
| | Public Water System Number 7100030 | 09/20/2001 11:30:48 AM | | | |
| 1. System Construction | | SCORE | | | |
| Drill Date | 04/01/1998 | | | | |
| Driller Log Available | NO | | | | |
| Sanitary Survey (if yes, indicate date of last survey) | YES | 1996 | | | |
| Well meets IDWR construction standards | NO | 1 | | | |
| Wellhead and surface seal maintained | YES | 0 | | | |
| Casing and annular seal extend to low permeability unit | NO | 2 | | | |
| Highest production 100 feet below static water level | NO | 1 | | | |
| Well located outside the 100 year flood plain | YES | 0 | | | |
| Total System Construction Score | | 4 | | | |
| 2. Hydrologic Sensitivity | | | | | |
| Soils are poorly to moderately drained | NO | 2 | | | |
| Vadose zone composed of gravel, fractured rock or unknown | YES | 1 | | | |
| Depth to first water > 300 feet | NO | 1 | | | |
| Aquitard present with > 50 feet cumulative thickness | NO | 2 | | | |
| Total Hydrologic Score | | 6 | | | |
| 3. Potential Contaminant / Land Use - ZONE 1A | | IOC Score | VOC Score | SOC Score | Microbial Score |
| Land Use Zone 1A | IRRIGATED CROPLAND | 2 | 2 | 2 | 2 |
| Farm chemical use high | YES | 2 | 0 | 2 | |
| IOC, VOC, SOC, or Microbial sources in Zone 1A | NO | NO | NO | NO | NO |
| Total Potential Contaminant Source/Land Use Score - Zone 1A | | 4 | 2 | 4 | 2 |
| Potential Contaminant / Land Use - ZONE 1B | | | | | |
| Contaminant sources present (Number of Sources) | YES | 20 | 12 | 13 | 11 |
| (Score = # Sources X 2) 8 Points Maximum | | 8 | 8 | 8 | 8 |
| Sources of Class II or III leacheable contaminants or | YES | 14 | 6 | 7 | |
| 4 Points Maximum | | 4 | 4 | 4 | |
| Zone 1B contains or intercepts a Group 1 Area | YES | 0 | 0 | 2 | 0 |
| Land use Zone 1B | Greater Than 50% Irrigated Agricultural Land | 4 | 4 | 4 | 4 |
| Total Potential Contaminant Source / Land Use Score - Zone 1B | | 16 | 16 | 18 | 12 |
| Potential Contaminant / Land Use - ZONE II | | | | | |
| Contaminant Sources Present | YES | 2 | 2 | 2 | |
| Sources of Class II or III leacheable contaminants or | YES | 1 | 1 | 1 | |
| Land Use Zone II | | 0 | 0 | 0 | |
| Potential Contaminant Source / Land Use Score - Zone II | | 3 | 3 | 3 | 0 |
| Potential Contaminant / Land Use - ZONE III | | | | | |
| Contaminant Source Present | YES | 1 | 1 | 1 | |

| | | | | | |
|---|--|---|--------------|--------------|--------------------|
| Sources of Class II or III leacheable contaminants or Is there irrigated agricultural lands that occupy > 50% of | YES NO | 1 0 | 1 0 | 1 0 | |
| Total Potential Contaminant Source / Land Use Score - Zone III | | 2 | 2 | 2 | 0 |
| Cumulative Potential Contaminant / Land Use Score | | 25 | 23 | 27 | 14 |
| 4. Final Susceptibility Source Score | | 15 | 15 | 15 | 15 |
| 5. Final Well Ranking | | High | High | High | High |
| Ground Water Susceptibility Report | Public Water System Name : FALLS WATER COMPANY INC Public Water System Number 7100030 | Well# : WELL #4 09/20/2001 11:31:00 AM | | | |
| 1. System Construction | | SCORE | | | |
| Drill Date | 07/26/1974 | | | | |
| Driller Log Available | YES | | | | |
| Sanitary Survey (if yes, indicate date of last survey) | YES | 1996 | | | |
| Well meets IDWR construction standards | NO | 1 | | | |
| Wellhead and surface seal maintained | YES | 0 | | | |
| Casing and annular seal extend to low permeability unit | NO | 2 | | | |
| Highest production 100 feet below static water level | NO | 1 | | | |
| Well located outside the 100 year flood plain | YES | 0 | | | |
| Total System Construction Score | | 4 | | | |
| 2. Hydrologic Sensitivity | | | | | |
| Soils are poorly to moderately drained | NO | 2 | | | |
| Vadose zone composed of gravel, fractured rock or unknown | YES | 1 | | | |
| Depth to first water > 300 feet | NO | 1 | | | |
| Aquitard present with > 50 feet cumulative thickness | NO | 2 | | | |
| Total Hydrologic Score | | 6 | | | |
| 3. Potential Contaminant / Land Use - ZONE 1A | | IOC Score | VOC Score | SOC Score | Microbial Score |
| Land Use Zone 1A | IRRIGATED CROPLAND | 2 | 2 | 2 | 2 |
| Farm chemical use high | YES | 2 | 0 | 2 | |
| IOC, VOC, SOC, or Microbial sources in Zone 1A | NO | NO | NO | NO | NO |
| Total Potential Contaminant Source/Land Use Score - Zone 1A | | 4 | 2 | 4 | 2 |
| Potential Contaminant / Land Use - ZONE 1B | | | | | |
| Contaminant sources present (Number of Sources) | YES | 21 | 20 | 20 | 9 |
| (Score = # Sources X 2) 8 Points Maximum | | 8 | 8 | 8 | 8 |
| Sources of Class II or III leacheable contaminants or | YES | 12 | 10 | 7 | |
| 4 Points Maximum | | 4 | 4 | 4 | |
| Zone 1B contains or intercepts a Group 1 Area | YES | 0 | 0 | 2 | 0 |
| Land use Zone 1B | Greater Than 50% Irrigated Agricultural Land | 4 | 4 | 4 | 4 |
| Total Potential Contaminant Source / Land Use Score - Zone 1B | | 16 | 16 | 18 | 12 |
| Potential Contaminant / Land Use - ZONE II | | | | | |
| Contaminant Sources Present | YES | 2 | 2 | 2 | |
| Sources of Class II or III leacheable contaminants or | YES | 1 | 1 | 1 | |
| Land Use Zone II | | 0 | 0 | 0 | |
| Potential Contaminant Source / Land Use Score - Zone II | | 3 | 3 | 3 | 0 |

| | | | | | |
|--|--|--|-----------------|-----------|------------------------|
| Potential Contaminant / Land Use - ZONE III | | | | | |
| Contaminant Source Present | | YES | 1 | 1 | 1 |
| Sources of Class II or III leacheable contaminants or | | YES | 1 | 1 | 1 |
| Is there irrigated agricultural lands that occupy > 50% of | | NO | 0 | 0 | 0 |
| Total Potential Contaminant Source / Land Use Score - Zone III | | | 2 | 2 | 2 |
| Cumulative Potential Contaminant / Land Use Score | | | 25 | 23 | 27 |
| 4. Final Susceptibility Source Score | | | 15 | 15 | 15 |
| 5. Final Well Ranking | | | High | High | High |
| Ground Water Susceptibility Report | | Public Water System Name : FALLS WATER COMPANY INC | Well# : WELL #5 | | |
| | | Public Water System Number 7100030 | | | 09/20/2001 11:31:12 AM |
| 1. System Construction | | | SCORE | | |
| Drill Date | | 06/18/1979 | | | |
| Driller Log Available | | YES | | | |
| Sanitary Survey (if yes, indicate date of last survey) | | YES | 1996 | | |
| Well meets IDWR construction standards | | NO | 1 | | |
| Wellhead and surface seal maintained | | YES | 0 | | |
| Casing and annular seal extend to low permeability unit | | YES | 0 | | |
| Highest production 100 feet below static water level | | NO | 1 | | |
| Well located outside the 100 year flood plain | | YES | 0 | | |
| Total System Construction Score | | | 2 | | |
| 2. Hydrologic Sensitivity | | | | | |
| Soils are poorly to moderately drained | | NO | 2 | | |
| Vadose zone composed of gravel, fractured rock or unknown | | YES | 1 | | |
| Depth to first water > 300 feet | | NO | 1 | | |
| Aquitard present with > 50 feet cumulative thickness | | NO | 2 | | |
| Total Hydrologic Score | | | 6 | | |
| 3. Potential Contaminant / Land Use - ZONE 1A | | | IOC Score | VOC Score | SOC Score |
| | | | | | Microbial Score |
| Land Use Zone 1A | | IRRIGATED CROPLAND | 2 | 2 | 2 |
| Farm chemical use high | | YES | 2 | 0 | 2 |
| IOC, VOC, SOC, or Microbial sources in Zone 1A | | NO | NO | NO | NO |
| Total Potential Contaminant Source/Land Use Score - Zone 1A | | | 4 | 2 | 4 |
| Potential Contaminant / Land Use - ZONE 1B | | | | | |
| Contaminant sources present (Number of Sources) | | YES | 20 | 11 | 11 |
| (Score = # Sources X 2) 8 Points Maximum | | | 8 | 8 | 8 |
| Sources of Class II or III leacheable contaminants or | | YES | 15 | 5 | 6 |
| 4 Points Maximum | | | 4 | 4 | 4 |
| Zone 1B contains or intercepts a Group 1 Area | | YES | 0 | 0 | 2 |
| Land use Zone 1B Greater Than 50% Irrigated Agricultural Land | | | 4 | 4 | 4 |
| Total Potential Contaminant Source / Land Use Score - Zone 1B | | | 16 | 16 | 18 |
| Potential Contaminant / Land Use - ZONE II | | | | | |
| Contaminant Sources Present | | YES | 2 | 2 | 2 |

| | | | | | |
|---|--|---|--------------|--------------|--------------------|
| Sources of Class II or III leacheable contaminants or Land Use Zone II | YES | 1 0 | 1 0 | 1 0 | |
| Potential Contaminant Source / Land Use Score - Zone II | | 3 | 3 | 3 | 0 |
| Potential Contaminant / Land Use - ZONE III | | | | | |
| Contaminant Source Present | YES | 1 | 1 | 1 | |
| Sources of Class II or III leacheable contaminants or | YES | 1 | 1 | 1 | |
| Is there irrigated agricultural lands that occupy > 50% of | NO | 0 | 0 | 0 | |
| Total Potential Contaminant Source / Land Use Score - Zone III | | 2 | 2 | 2 | 0 |
| Cumulative Potential Contaminant / Land Use Score | | 25 | 23 | 27 | 14 |
| 4. Final Susceptibility Source Score | | 13 | 13 | 13 | 13 |
| 5. Final Well Ranking | | High | High | High | High |
| Ground Water Susceptibility Report | Public Water System Name : FALLS WATER COMPANY INC Public Water System Number 7100030 | Well# : WELL #6 09/20/2001 11:31:24 AM | | | |
| 1. System Construction | | SCORE | | | |
| Drill Date | 10/23/1992 | | | | |
| Driller Log Available | NO | | | | |
| Sanitary Survey (if yes, indicate date of last survey) | YES | 1996 | | | |
| Well meets IDWR construction standards | NO | 1 | | | |
| Wellhead and surface seal maintained | YES | 0 | | | |
| Casing and annular seal extend to low permeability unit | NO | 2 | | | |
| Highest production 100 feet below static water level | NO | 1 | | | |
| Well located outside the 100 year flood plain | YES | 0 | | | |
| Total System Construction Score | | 4 | | | |
| 2. Hydrologic Sensitivity | | | | | |
| Soils are poorly to moderately drained | NO | 2 | | | |
| Vadose zone composed of gravel, fractured rock or unknown | YES | 1 | | | |
| Depth to first water > 300 feet | NO | 1 | | | |
| Aquitard present with > 50 feet cumulative thickness | NO | 2 | | | |
| Total Hydrologic Score | | 6 | | | |
| 3. Potential Contaminant / Land Use - ZONE 1A | | IOC Score | VOC Score | SOC Score | Microbial Score |
| Land Use Zone 1A | IRRIGATED CROPLAND | 2 | 2 | 2 | 2 |
| Farm chemical use high | YES | 2 | 0 | 2 | |
| IOC, VOC, SOC, or Microbial sources in Zone 1A | NO | NO | NO | NO | NO |
| Total Potential Contaminant Source/Land Use Score - Zone 1A | | 4 | 2 | 4 | 2 |
| Potential Contaminant / Land Use - ZONE 1B | | | | | |
| Contaminant sources present (Number of Sources) | YES | 22 | 21 | 21 | 9 |
| (Score = # Sources X 2) 8 Points Maximum | | 8 | 8 | 8 | 8 |
| Sources of Class II or III leacheable contaminants or | YES | 12 | 10 | 7 | |
| 4 Points Maximum | | 4 | 4 | 4 | |
| Zone 1B contains or intercepts a Group 1 Area | YES | 0 | 0 | 2 | 0 |
| Land use Zone 1B Greater Than 50% Irrigated Agricultural Land | | 4 | 4 | 4 | 4 |
| Total Potential Contaminant Source / Land Use Score - Zone 1B | | 16 | 16 | 18 | 12 |

| | | | | | | |
|--|--|--------------------|-----------------|-----------|------------------------|-----------------|
| Potential Contaminant / Land Use - ZONE II | | | | | | |
| Contaminant Sources Present | | YES | 2 | 2 | 2 | |
| Sources of Class II or III leacheable contaminants or | | YES | 1 | 1 | 1 | |
| Land Use Zone II | | | 0 | 0 | 0 | |
| Potential Contaminant Source / Land Use Score - Zone II | | | 3 | 3 | 3 | 0 |
| Potential Contaminant / Land Use - ZONE III | | | | | | |
| Contaminant Source Present | | YES | 1 | 1 | 1 | |
| Sources of Class II or III leacheable contaminants or | | YES | 1 | 1 | 1 | |
| Is there irrigated agricultural lands that occupy > 50% of | | NO | 0 | 0 | 0 | |
| Total Potential Contaminant Source / Land Use Score - Zone III | | | 2 | 2 | 2 | 0 |
| Cumulative Potential Contaminant / Land Use Score | | | 25 | 23 | 27 | 14 |
| 4. Final Susceptibility Source Score | | | 15 | 15 | 15 | 15 |
| 5. Final Well Ranking | | | High | High | High | High |
| Ground Water Susceptibility Report | Public Water System Name : FALLS WATER COMPANY INC | | Well# : WELL #8 | | 09/20/2001 11:31:37 AM | |
| | Public Water System Number 7100030 | | | | | |
| 1. System Construction | | | SCORE | | | |
| Drill Date | | 01/01/2000 | | | | |
| Driller Log Available | | NO | | | | |
| Sanitary Survey (if yes, indicate date of last survey) | | YES | 1996 | | | |
| Well meets IDWR construction standards | | NO | 1 | | | |
| Wellhead and surface seal maintained | | YES | 0 | | | |
| Casing and annular seal extend to low permeability unit | | NO | 2 | | | |
| Highest production 100 feet below static water level | | NO | 1 | | | |
| Well located outside the 100 year flood plain | | YES | 0 | | | |
| Total System Construction Score | | | 4 | | | |
| 2. Hydrologic Sensitivity | | | | | | |
| Soils are poorly to moderately drained | | NO | 2 | | | |
| Vadose zone composed of gravel, fractured rock or unknown | | YES | 1 | | | |
| Depth to first water > 300 feet | | NO | 1 | | | |
| Aquitard present with > 50 feet cumulative thickness | | NO | 2 | | | |
| Total Hydrologic Score | | | 6 | | | |
| 3. Potential Contaminant / Land Use - ZONE 1A | | | IOC Score | VOC Score | SOC Score | Microbial Score |
| Land Use Zone 1A | | IRRIGATED CROPLAND | 2 | 2 | 2 | 2 |
| Farm chemical use high | | YES | 2 | 0 | 2 | |
| IOC, VOC, SOC, or Microbial sources in Zone 1A | | NO | NO | NO | NO | NO |
| Total Potential Contaminant Source/Land Use Score - Zone 1A | | | 4 | 2 | 4 | 2 |
| Potential Contaminant / Land Use - ZONE 1B | | | | | | |
| Contaminant sources present (Number of Sources) | | YES | 12 | 8 | 9 | 7 |
| (Score = # Sources X 2) 8 Points Maximum | | | 8 | 8 | 8 | 8 |
| Sources of Class II or III leacheable contaminants or | | YES | 11 | 4 | 5 | |
| 4 Points Maximum | | | 4 | 4 | 4 | |

| | | | | | |
|--|-----|------|------|------|------|
| Zone 1B contains or intercepts a Group 1 Area | YES | 0 | 0 | 2 | 0 |
| Land use Zone 1B Greater Than 50% Irrigated Agricultural Land | | 4 | 4 | 4 | 4 |
| Total Potential Contaminant Source / Land Use Score - Zone 1B | | 16 | 16 | 18 | 12 |
| Potential Contaminant / Land Use - ZONE II | | | | | |
| Contaminant Sources Present | YES | 2 | 2 | 2 | |
| Sources of Class II or III leacheable contaminants or | YES | 1 | 1 | 1 | |
| Land Use Zone II | | 0 | 0 | 0 | |
| Potential Contaminant Source / Land Use Score - Zone II | | 3 | 3 | 3 | 0 |
| Potential Contaminant / Land Use - ZONE III | | | | | |
| Contaminant Source Present | YES | 1 | 1 | 1 | |
| Sources of Class II or III leacheable contaminants or | YES | 1 | 1 | 1 | |
| Is there irrigated agricultural lands that occupy > 50% of | NO | 0 | 0 | 0 | |
| Total Potential Contaminant Source / Land Use Score - Zone III | | 2 | 2 | 2 | 0 |
| Cumulative Potential Contaminant / Land Use Score | | 25 | 23 | 27 | 14 |
| 4. Final Susceptibility Source Score | | 15 | 15 | 15 | 15 |
| 5. Final Well Ranking | | High | High | High | High |